DETAILED ACTION

This action is responsive to the amendment filed on November 17, 2009. Claim 34 was amended. Claims 2-27 and 29-58 are pending.

Response to Amendment

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 2-3, 5-12, 14, 18, 23, 26, 27, 29-30, 32-39, 41, 45, 50, and 53-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Claessens et al., U.S. Patent No. 7,222,255, further in view of Rehkopf, U.S. Patent No. 6,505,249.

Claessens teaches the invention substantially as claimed including a system and method for network performance testing (see abstract).

Regarding claims 7 and 34, Claessens teaches a method and an article of manufacture a method and article of manufacture of optimizing network configuration settings for a user's client machine, the method and article of manufacture comprising:

(a) providing a plurality of groups of network configuration settings (col. 10, lines 15-25, Claessens discloses different test configurations associated with identifiers);

(b) establishing a network connection between the client machine and a remote server (col. 7, line 65 — col. 8, line 3, col. 8, lines 28-33, Claessens discloses a communication session established between a client and server);

(c) selecting one of the groups of configuration settings to be used by the client machine from the provided groups of settings (col. 10, lines 33-41, Claessens discloses choosing a configuration setting from the inventory database);

(d) automatically conducting one or more performance tests using the selected network configuration settings during the established network connection (col. 10, lines 42-63, Claessens discloses a network performance test with the selected configuration settings);

Claessens fails to teach the limitation further including providing settings to be used by the user's client machine; wherein step (c) is initiated on the user's client machine; repeating steps (c) and (d) for one or more other groups of network configuration settings during the established network connection and (f) automatically adjusting the network configuration settings of the client machine, based on the results of the performance tests, wherein the adjusted network configuration settings are settings that optimize the performance of the client machine.

However, Rehkopf teaches a method for benchmarking and optimizing the end to end processing performance of a client-server based computer system to determine the optimal values of the system variables (see abstract). Rehkopf teaches performance settings for each system (col. 2, lines 21-30, 51-58), performance variables chosen on a system (column 5, lines 28-54), different benchmarking tests

being performed (col. 2, line 59 – col. 3, line 11) and the optimal value of the performance variables chosen to modify the system and optimize performance (col. 6, lines 37-45).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Claessens in view of Rehkopf to provide settings to be used by the user's client machine; wherein step (c) is initiated on the user's client machine; repeating steps (c) and (d) for one or more other groups of network configuration settings during the established network connection and (f) automatically adjusting the network configuration settings of the client machine, based on the results of the performance tests, wherein the adjusted network configuration settings are settings that optimize the performance of the client machine. One would be motivated to do so because it allows for the use of the most efficient network configuration settings.

Regarding claims 2 and 29, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein the adjustments of the network configuration settings are made through the use of an algorithm that performs statistical analysis on past network configuration setting performance test result data (col. 3, lines 13-26, col. 7, lines 3-10, Rehkopf discloses the use of statistical analysis and a statistical algorithm on past performance on the client).

Regarding claims 3 and 30, Rehkopf teaches the method and article of manufacture of claims 2 and 29 wherein regression is used to perform the statistical analysis (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 5 and 32, Rehkopf teaches the method and article of manufacture of claims 2 and 29 wherein the statistical analysis is performed by the client machine (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 6 and 33, Rehkopf teaches the method and article of manufacture of claims 2 and 29 wherein the statistical analysis is performed by the remote server (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 8 and 35, Rehkopf teaches the method and article of manufacture of claims 7 and 34 further comprising:

(g) the user specifying, via the client machine, at least one network performance preference; and

(h) executing performance metric scoring on each of the different provided groups of network configuration settings, based on a relative weight assigned to the network performance preference (col. 2 and 3).

Regarding claims 9 and 36, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein logic running on the remote server statistically

analyzes the results of the performance tests and determines one or more groups of network configuration settings for use on the client machine (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 10 and 37, Rehkopf teaches the method and article of manufacture of claims 9 and 36 wherein the logic includes an intelligent optimization algorithm which uses historical performance data to statistically assess positive or negative scoring variations when a particular network configuration setting is adjusted (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 11 and 38, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein the adjustments of the network configuration settings are made through the use of an algorithm that determines future groups of network configuration settings to test (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 12 and 39, Rehkopf teaches the method and article of manufacture of claims 7 and 34 further comprising:

(g) continually monitoring the network configuration performance of the client machine, after step (f) has been performed; and

(h) automatically adjusting the monitored network configuration settings of the client machine to maintain optimal network performance of the client machine (col. 4, lines 35-54, Rehkopf discloses continually monitoring performance and re-evaluating).

Regarding claims 14 and 41, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein one of the network configuration settings is latency (col. 8, lines 1-19, Rehkopf discloses bandwidth).

Regarding claims 18 and 45, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein one of the network configuration settings is Maximum Segment Size (MSS) (col. 8, lines 1-19, Rehkopf discloses segment size).

Regarding claims 23 and 50, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein one of the network configuration settings is packet size (col. 8, lines 1-19).

Regarding claims 26 and 53, Rehkopf teaches the method and article of manufacture of claims 7 and 34 further comprising:

(g) assigning a percentage score to each applicable network configuration setting;

(h) multiplying the relative weight of each network configuration setting by the percentage score for the network configuration setting, wherein the relative weight is determined as a function of the user's network performance preferences; and

(i) adding the resulting products of step (h) to determine a weighted overall percentage score (col. 2, 3).

Regarding claims 27 and 54, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein step (b) further comprises:

(c)(i) the user selecting a group of default network configuration settings (col. 2, lines 23-30).

Regarding claims 55 and 56, Rehkopf teaches the method and article of manufacture of claims 7 and 34 further comprising:

(g) storing the plurality of groups of network configuration settings in a storage location wherein step (c) further comprises selecting one of the groups of network configuration settings for the client machine from the storage location (col. 2, 3).

Regarding claims 57 and 58, Rehkopf teaches the method and article of manufacture of claims 7 and 34, wherein step (a) is performed by determining a plurality of groups of network configuration settings to be used by the user's client machine, wherein the determined settings are the provided settings (col. 10, lines 15-41).

3. In considering claims 4 and 31, Claessens and Rehkopf are silent in that a polynomial curve fit is used to perform statistical analysis. "Official notice" is taken that both the concept and the advantages of a polynomial curve fit are well known in the art. It would have been obvious to one skilled in the art to utilize a polynomial curve fit as an efficient way to perform statistical analysis.

In considering claims 15-17, 19-22, 24, 25, 42-44, 46-49, 51, and 52, Rehkopf is silent in that ping time, network connection stability, Maximum Transmission Unit (MTU), Receive Window (RWIN), Time To Live (TTL), Black Hole Detection, Auto Discovery of Path Maximum Transmission Unit (MTU), upload throughput speed, and download throughput speed are various forms of network configuration settings. "Official notice" is taken that both the concept and the advantages of those settings are well known in the art. It would have been obvious to one skilled in the art to analyze and adjust those settings in the network to monitor and optimize the performance of a network.

Allowable Subject Matter

4. Claims 13 and 40 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments, filed November 17, 2009, regarding the use of Claessens and Rehkopf have been fully considered but they are not persuasive.

6. In response to applicant's argument that Claessens is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Claessens discloses a system and method for network performance testing.

7. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Step (d) is in Claessens, not Rehkopf as argued. The different groups of configuration settings are found in Claessens, while the repetition of testing settings is found in Rehkopf. As the applicant points out, every time the floating variable is changed Rehkopf tests that new setting. Each time the floating variable is changed that signifies a different group of settings because it is paired with other settings. The combination of Claessens and Rehkopf teaches optimizing (which is specifically shown in Rehkopf) network configuration settings. The examiner disagrees with the applicant's suggestion that Claessens, which they admit relates to network performance testing, has nothing to do with the claimed invention. The claimed invention is a method of optimizing network configuration settings to be used by the user's client machine. Claessens teaches the majority of the claimed invention and the obvious combination with Rehkopf teaches the performance test on a user's client machine. One of ordinary

skill in the art would be able to apply the knowledge of network performance testing to test performance of a user's client machine on a network.

8. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

9. The declaration submitted is not properly executed and does not adequately demonstrate prior invention.

In order to move on with prosecution the Examiner would like to point out some substantive deficiencies with the proposed declaration. These comments are illustrative and not comprehensive. The burden is on applicant to provide a proper declaration if that is the method chosen for overcoming a rejection.

The Examiner would like to include some important sections from the MPEP for the applicant's guidance:

"The affidavit or declaration and exhibits must clearly explain which facts or data applicant is relying on to show completion of his or her invention prior to the particular

date. Vague and general statements in broad terms about what the exhibits describe along with a general assertion that the exhibits describe a reduction to practice "amounts essentially to mere pleading, unsupported by proof or a showing of facts" and, thus, does not satisfy the requirements of 37 CFR 1.131(b). In re Borkowski, 505 F.2d 713, 184 USPQ 29 (CCPA 1974). Applicant must give a clear explanation of the exhibits pointing out exactly what facts are established and relied on by applicant. 505 F.2d at 718-19, 184 USPQ at 33. See also In re Harry, 333 F.2d 920, 142 USPQ 164 (CCPA 1964) (Affidavit "asserts that facts exist but does not tell what they are or when they occurred.")."

The applicant needs to show how the exhibits support the claimed invention. Specifically, the sections pointed to in exhibit 1 that are said to correlate to steps (a), (c), and (e) do not appear to be fully supported by exhibit 1. Step (a) teaches a plurality of groups of network configuration settings; it is not clear that the settings are grouped together. Step (c) teaches selecting from groups of network configuration settings while the section relied on in exhibit 1 only discloses one group of settings; it is not clear that there is more than a single group of settings, let alone settings that are grouped together. Step (e) teaches repeating the selection from the groups of network configuration settings while the section relied on in exhibit 1 only discloses one group of settings and not repetition of choosing settings; the only repetition in the section relied on is that of multiple tests of the selection of settings that was chosen.

In response to the applicant's arguments that a variety of network setting configurations and a series of connectivity tests means that a plurality of groups of network configuration settings are tests, the examiner disagrees. On page 2, paragraph 7 of the applicant's specification there is a predefined group of network configuration settings. A variety of network setting configurations and a series of connectivity tests is not the same as a predefined group of network configuration settings or a group of network configuration settings as claimed; there is nothing in the exhibit that teaches a variety of settings and a series of tests means that settings are grouped.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,842,431 to Clarkson et al.

U.S. Pat. No. 6,725,229 to Majewski et al.

U.S. Pat. No. 6,292,483 to Kerstein

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AVI GOLD whose telephone number is (571)272-4002. The examiner can normally be reached on M-F 8:30 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Examiner, Art Unit 2457

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